



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/842,363

04/25/2001

Ahmad Ansari

7780/13 (T00341)

6562

83808 7590 12/23/2009
AT & T Legal Department - BHGL
Attn: Patent Docketing Room 2A-207
One AT&T Way
Bedminster, NJ 07921

EXAMINER

RAMAN, USHA

ART UNIT

PAPER NUMBER

2424

MAIL DATE

DELIVERY MODE

12/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/842,363	Applicant(s) ANSARI ET AL.	
	Examiner USHA RAMAN	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-10 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-10 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 8, 2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 21 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 7-10, and 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 21 and 25 recite the limitation of "compressing the decomposed video content using one of a sub-band technique or a vector technique". Applicant's disclosure however notes that video is first compressed (step 302) and then decomposed (step 304) (see Specification, page 12, lines 2-3 and lines 8-9) and

Art Unit: 2424

further discloses that the video is decomposed using compression techniques (see Specification, page 13, lines 13-17). Accordingly it is unclear how the step of "compressing the decomposed video content" occurs when the disclosure states that video is first compressed and then decomposed. The claim has been best understood in light of the specification and examined accordingly.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-4, 6-13, 15-17, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gemmell (US PG Pub. 2002/0116473) in view of Tillman et al. US Pat. (6,496,980), Payton (US Pat. 5,790,935) and Chadda (US Pat. 6,392,705).

With regards to claims 1, 21, and 25 Gemmell discloses a method of downloading a video content representing a program to a subscriber terminal comprising:

Decomposing video content into a plurality of video quality portions [0006]: a low quality video portion of the plurality video quality portions comprising a complete copy of the program at a video lower than at least one of the plurality of video quality portions [0006], [0015];

Downloading a complete copy of the low quality video portion to the subscriber terminal ([0044] "single client request results in data streams of the requested layer begin transmitted in their entirety from the server") over a network [0033] for storage locally at the subscriber terminal (208), [0042];

Receiving from the subscriber terminal a selection request for the program corresponding to the video content after downloading the complete copy of the low quality video portion ([0042] "during the user directed second play back...")

Downloading at least one of the plurality of video quality portions having a video quality higher than a low quality video portion to the subscriber terminal over the network in response to the selection request ([0042] "during a user-directed second playback, layer 2 is streamed, stored..."). In the preceding example, the streaming layer 2 during user-directed second playback reads on the "real time" downloading of the at least one of the plurality of video quality portions (i.e. second layer) having a video quality higher than the low quality video portion.

Gemmell discloses the client computer is coupled over a network (such as LAN, WAN, etc.) to the server [0033], [0034]. Gemmell additionally discloses that the transmission of layers separately is particularly advantageous in bandwidth limitations based on network capacity/types [0004]. Gemmell is however silent on downloading the plurality of quality portions via a digital subscriber line. Gemmell further discloses a method of "pre-fetching" certain layers so that it can be available "on-hand" in the client's memory for quick presentation (Gemmell: [0048], [0051]).

Art Unit: 2424

Gemmell only discloses pre-fetching within the context of second and subsequent layers and silent on pre-fetching the first portion of the video during off peak hours.

While Gemmell is silent on decomposing video content using one of a sub-band or a vector quantization compression techniques, Chadda is evidence that it was well known in the art at the time of the invention to use wavelet and sub-band decomposition techniques (col. 8, lines 48-52).

In an analogous art, Tillman is evidence that digital subscriber lines were well known in the art of time for network connection and further evidence for downloading plurality of quality portions over a bandwidth constrained network such as the digital subscriber line (see column 3 lines 58-64), wherein examiner takes official notice that asymmetric DSL was notoriously well known at time of the invention.

In a further related art, Payton discloses a method of predicting items a subscriber might like based on user preferences and downloading such items to the subscriber terminal during off peak hours (see abstract).

It would have been obvious to one of ordinary skill in the art to advantageously incorporate the teachings Chadda into the system of Gemmell by decomposing the video into a plurality of quality portions using a wavelet or sub-band technique thereby utilizing an optimal compression technique, and further incorporate the teachings of Payton by predicting what a user likes, and downloading the low quality portion of the predicted items to the user's terminal during off peak times so that the predicted items can be available "on hand" for immediate playback, wherein the user can examine the video and determine if a

Art Unit: 2424

higher quality for the video is desired. Additionally, one skilled in the art could have easily combined the methods of transmitting the various quality portions via a digital subscriber line connection, as taught by Tillman with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

With further regards to claim 25, Gemmell additionally discloses a computer-readable storage medium comprising a set of instructions for performing the above method [0027].

With regards to claim 7, the modified system further comprises, wherein each video quality portions represents a different level of service quality (Gemmell: [0018]. [0053]-[0057]).

With regards to claims 8, 23 and 24, the modified system further comprises the step of determining a download bandwidth available to subscriber terminal (Gemmell: [0035]) and selecting at least one of the plurality of video quality portions having a quality higher than the low quality portion based on the download bandwidth (Gemmell: [0035]).

With regards to claims 9, and 22, the modified system discloses a hierarchical layer wherein each enhancement layer enhances the lower layers but do not repeat the data from the lower layers (Gemmell: [0006]). This reads on the claimed pyramidal scheme.

With regards to claim 10, the modified system further discloses the method of recomposing a plurality of downloaded video quality portions representing at the subscriber terminal for presenting the content to a user (Gemmell: [0012],[0040]).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USHA RAMAN whose telephone number is (571)272-7380. The examiner can normally be reached on Mon-Fri: 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Christopher Kelley/
Supervisory Patent Examiner, Art
Unit 2424

/Usha Raman/